AMENDMENTS TO THE CLAIMS

- 1. (Canceled).
- 2. (Canceled).
- 3. (Canceled).
- 4. (Canceled).
- 5. (Canceled).
- 6. (Currently amended) An automated diagnostic system for use in a computing environment, the system comprising:

a processor configured to implement and comprising a plurality of objects which, when executed by the processor, interact to determine a diagnosis of a patient, wherein the objects include at least two of: a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object[,]; and

a digital storage device for storing wherein each object has the plurality of objects and the corresponding data and processes for each object, and wherein the data is encapsulated so that other objects only see the processes of a particular object that can be invoked to access the data.

- 7. (Original) The system of Claim 6, wherein the objects include a plurality of disease objects and a plurality of symptom objects.
- 8. (Original) The system of Claim 6, additionally comprising an engine object to coordinate the other objects.
- 9. (Withdrawn) An automated diagnostic system comprising a plurality of objects which interact to determine a diagnosis of a patient, wherein the objects include at least a plurality of disease objects and a plurality of symptom objects, and wherein at least some of the objects perform their own tasks and call upon other objects to perform their tasks at the appropriate time.

10. (Previously presented) The system of Claim 6, wherein the objects are arranged in a hierarchical relationship such that the result of one of the objects is input to another of the objects.

- 11. (Previously presented) The system of Claim 6, wherein the objects include a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object.
- 12. (Previously presented) The system of Claim 11, wherein the symptom object invokes the valuator object.
- 13. (Previously presented) The system of Claim 11, wherein the valuator object invokes the question object.
- 14. (Previously presented) The system of Claim 11, wherein the question object invokes the node object.
- 15. (Withdrawn) The system of Claim 6, wherein a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease.
- 16. (Previously presented) The system of Claim 6, wherein a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease.
- 17. (Previously presented) The system of Claim 6, wherein a particular disease object is representative of a plurality of related diseases that share common symptoms.
- 18. (Previously presented) The system of Claim 6, wherein once an object is invoked, the object acts independently of other objects and a particular object retains a record of its actions for future reference.
 - 19. (Canceled).

- 20. (Previously presented) The system of Claim 6, wherein a particular disease object monitors the questions and answers of other disease objects.
- 21. (Previously presented) The system of Claim 8, wherein the engine object coordinates a plurality of concurrently operating disease objects by switching execution among the disease objects.
- 22. (Withdrawn) The system of Claim 9, wherein the objects additionally include a plurality of valuator objects.
- 23. (Withdrawn) The system of Claim 22, wherein one of the symptom objects invokes one of the valuator objects.
- 24. (Withdrawn) The system of Claim 22, wherein the plurality of objects includes a plurality of question objects and node objects.
- 25. (Withdrawn) The system of Claim 24, wherein one of the valuator objects invokes one of the question objects.
- 26. (Withdrawn) The system of Claim 24, wherein one of the question objects invokes one of the node objects.
- 27. (Withdrawn) The system of Claim 9, wherein a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease.
- 28. (Withdrawn) The system of Claim 9, wherein a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease.
- 29. (Withdrawn) The system of Claim 9, wherein a particular disease object is representative of a plurality of related diseases that share common symptoms.

30. (Withdrawn) The system of Claim 9, wherein the objects act independently of other objects and a particular object retains a record of its actions for future reference.

- 31. (Withdrawn) The system of Claim 9, wherein each object has corresponding data and processes, and wherein the data is encapsulated so that other objects only see the processes of a particular object that can be invoked to access the data.
- 32. (Withdrawn) The system of Claim 9, wherein a particular disease object monitors the questions and answers of other disease objects.
- 33. (Withdrawn) The system of Claim 9, additionally comprising an engine object to coordinate the other objects.
- 34. (Withdrawn) The system of Claim 33, wherein the engine object coordinates a plurality of concurrently operating disease objects by switching execution among the disease objects.
- 35. (New) The system of Claim 6, wherein the disease object directly invokes another disease object.
- 36. (New) The system of Claim 6, wherein the disease object directly invokes the symptom object.
 - 37. (New) The system of Claim 6, wherein each object has at least constant data.
- 38. (New) The system of Claim 6, wherein at least one of the disease object and the symptom object has variable data.
- 39. (New) The system of Claim 7, wherein each disease object is associated with one disease.
- 40. (New) The system of Claim 7, wherein each disease object is associated with a phase of one disease.

41. (New) The system of Claim 7, wherein each symptom object is associated with one symptom.

42. (New) The system of Claim 7, wherein each symptom object is associated with a sub-symptom of one symptom.